Future Permit Requirements for Vessels:
EPA Technology Based Effluent Limits for Ballast Water Treatment

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Clean Water Act Authority

- Until December 19, 2008 EPA will have a regulatory exemption for ballast water and other incidental discharges.

- Due to court order, this exemption will be vacated.

- As a result, many vessels must have a 402 Clean Water Act NPDES permit to discharge legally after that date.

- Due to congressional action, these permits will not apply to any recreational vessel (now regulated by different section of the Act).

- Due to congressional action, the permitting program will also not apply to non-recreational vessels less than 79 feet fishing vessels (regardless of size) except for Ballast Water discharges until at least July, 2010.

CWA PERMIT BASICS

For more info visit http://cfpub.epa.gov/npdes/

- "Discharge of a pollutant" generally prohibited without a permit [CWA § 301(a)]

- National Pollutant Discharge Elimination System (NPDES) Permits [CWA § 402]
  - Individual permits
  - General permits
  - Permit Term not to exceed 5 years
  - State authorization (46 States and authorized territories)
  - For EPA-issued permits, State 401 certification required

EPA Permit Development

- June 21, 2007 Fed Reg notice (72 FR 34241)
  - Explain implications and seek public input
    - Over 1,600 responses received

- June 17, 2008 Fed Reg notice (73 FR 34296)
  - Proposed for public comment two draft NPDES general permits for discharges incidental to normal operation of vessels
  - Due to recent legislation, EPA will finalize only one of these permits.
- On or around December 19, 2008, EPA will finalize the Vessel General Permit for vessels greater than 79 feet (excluding recreational vessels and fishing vessels).

Permit Requirements
(this iteration)

- Initial issuance of general permit will be national in scope

- No EPA fees

- Under CWA, NPDES permitting for vessels being used as a means of transportation covers inland waters and 3 nautical mile (nm) Territorial Sea.

Permit Requirements
(this iteration)

- EPA national general permit does not ensure national consistency.

- Under section 401 of the Clean Water Act, states may add requirements for their state waters provided they are based on:
    - State Law, or
    - State Water Quality Standards

- Some states have indicated they will be adding additional requirements.

Effluent Limits

- Technology-Based Effluent Limits applicable to all vessels

- Discharge Specific Effluent limits: 28 discharges identified, each with at least one BMP associated with the discharge

  - Ballast Water, Bilgewater, AFFF, Hull Leachate, Graywater, Underwater Husbandry. . .

Discharge Specific Limits: Ballast Water

- The permit:
  - Incorporates Coast Guard mandatory management and exchange requirements
  - Vessels engaged in Pacific Nearshore Voyages must conduct exchange greater than 50 nm from the coast – considering for Atlantic/Gulf of Mexico
  - Mandatory saltwater flushing for all vessels with residual ballast water and sediment (NOBOBs) coming from outside the USEEZ

Discharge Specific Limits: Ballast Water (cont.)

- The permit:
  - Must use shore based treatment if available and economically practicable and achievable
  - Must conduct exchange as early as practicable
- Exchange/flushing requirements have a safety exemption and do not mandate diversion.
- Reopener clause in the permit to allow for inclusion of a more stringent standard if appropriate before permit reissuance.

Experimental Ballast Water Treatment Systems

- Permittees may discharge residual biocides if:
  - Lower than acute water quality criteria
  - Lower than 100 ug/L of residual chlorine
- EPA specifically requested comment on appropriate limits, and whether to include other limits for biocides (i.e. Total Residual Oxidant).
- In final permit, EPA is considering inclusion of these limits.
- Permittees may apply for individual permits if they do not meet these terms

Ballast Water Treatment Standards

- Why is EPA not requiring numeric living organism Ballast Water Treatment Standards for the 2008 permit?

- What is Best Available Technology (BAT) economically achievable?

- At this time, EPA found that treatment technologies are not currently available and economically achievable to be installed on all vessels by December 20, 2008.

BAT - available

- What does EPA need to show that technologies are available?
  - Robust effectiveness data for at least one treatment system
  - Data that at least one system can function reliably on-board ships.
  - At least minimal installation capacity
  - Robust economic/costing information for installation and maintenance of the systems.

Changes in future "availability"

- Much has changed in the last year – more will change over the next few years.

- If technologies become available very quickly, EPA may use reopener clause and require technology sooner than 5 years

- EPA will continue evaluating what we consider available under a BAT standard over the life of the permit and beyond.

Future Permit Requirements and Effluent Limits

- Once Technologies are available, EPA may require limits that reflect the more effective technologies.

- EPA will set future limits based on availability and economic achievability. This means:
  - Standards may vary dependent upon age or size of vessels

Future Permit Requirements and Effluent Limits

- Once systems are considered available under BAT, EPA does not nor will not type approve nor mandate specific systems.
  - EPA will set effluent limits: it is upon the permittee (ship owner/operator) to ensure they select a system that works and functions effectively.
- IMO standard might be a good interim limit, but lower concentration limits as ultimate goal (i.e. Administration proposal – 2 orders of magnitude lower than IMO).

For More Information

- Visit www.epa.gov/npdes/vessels

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